October 12, 2021

U.S. Construction Outlook:

Pandemic Impacts, Policy Initiatives, Project Implications

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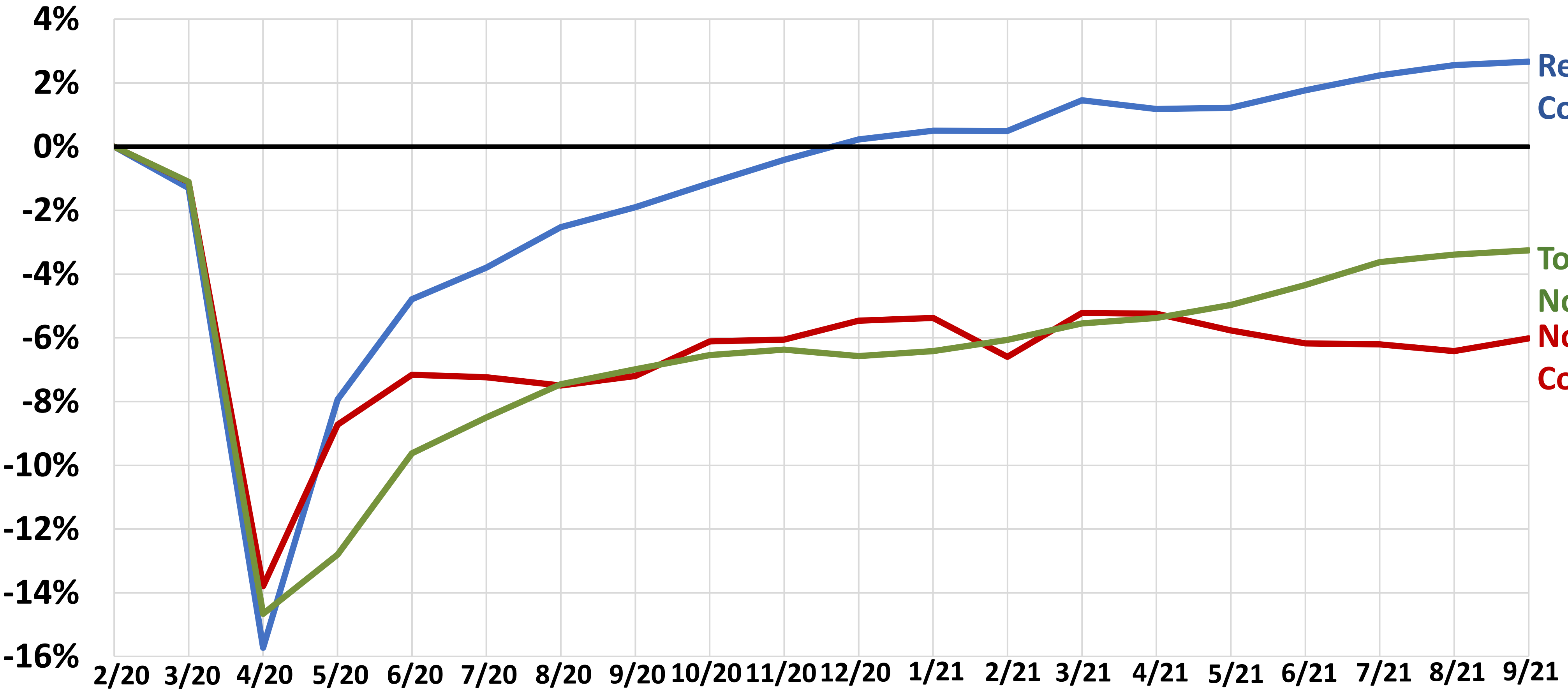
Total Nonfarm & Construction Employment, Feb. 2020–Sep. 2021

cumulative change (seasonally adjusted)

Change to 9/21 from:



	2/20	9/20
Residential Construction	2.7%	4.7%
Total Nonfarm	-3.3%	4.0%
Nonresidential Construction	-6.0%	1.3%

Source: BLS current employment statistics, https://www.bls.gov/ces/

State construction employment change, Feb. 2020–August 2021

11 states and DC **up**, 39 states **down** (U.S.: –3.0%)

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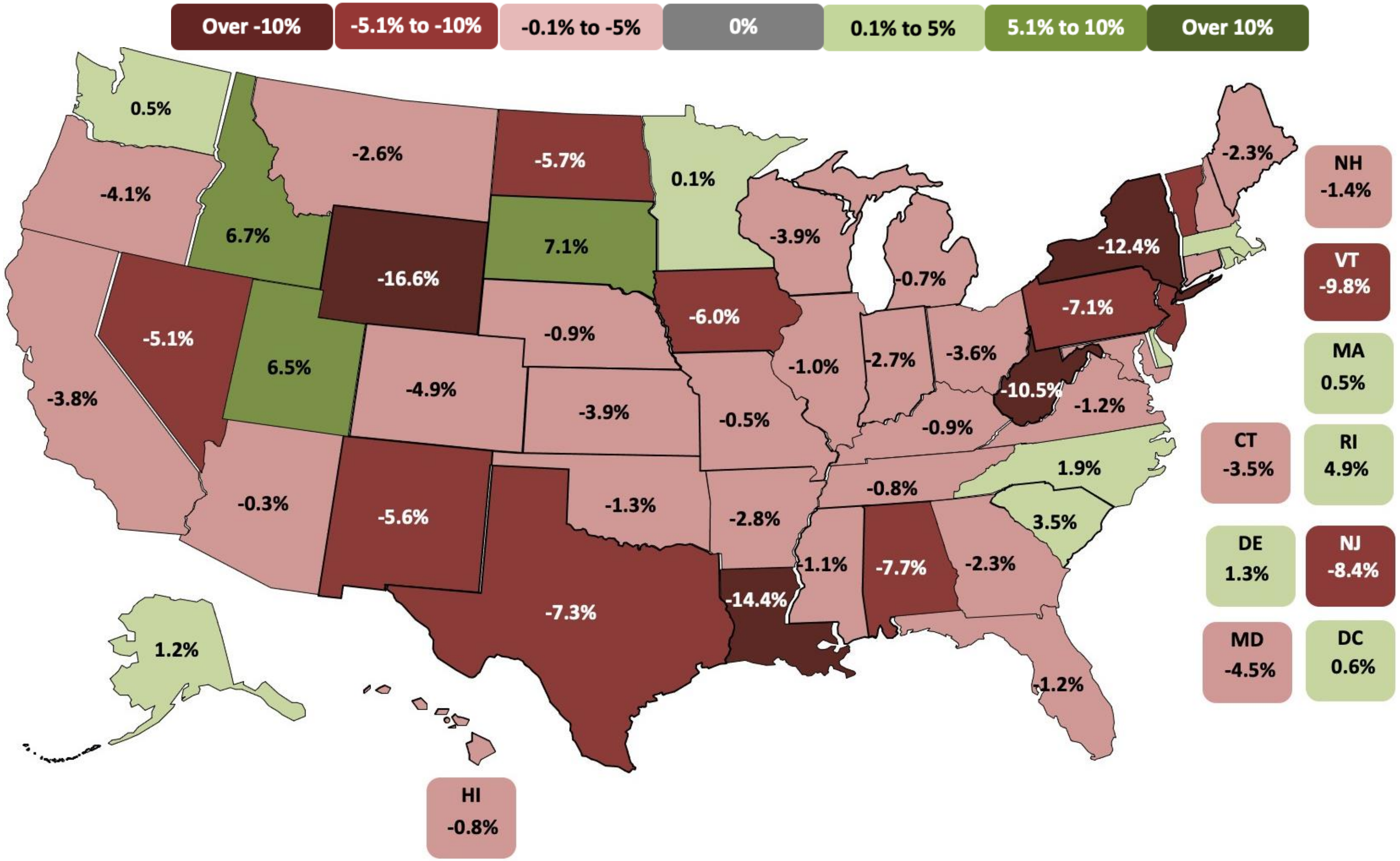
Top 5

South Dakota	7.1%
Idaho	6.7%
Utah	6.5%
Rhode Island	4.9%
South Carolina	3.5%

Bottom 5

Wyoming	-16.6%
Louisiana	-14.4%
New York	-12.4%
West Virginia	-10.5%
Vermont	-9.8%

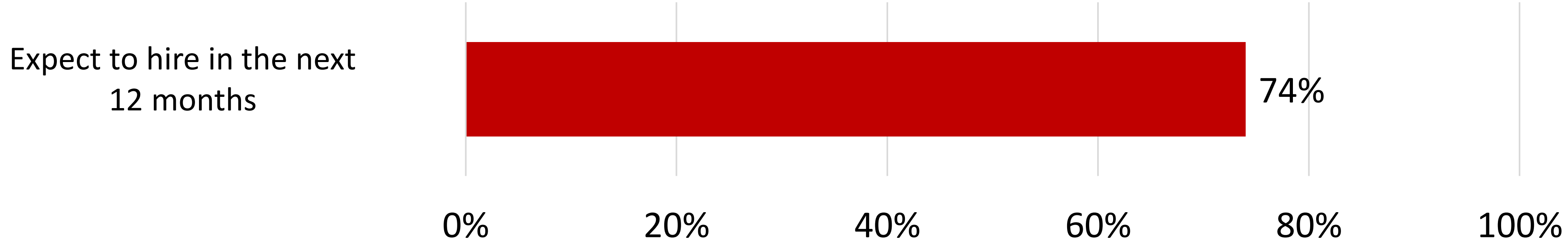


Note: Shading based on unrounded numbers

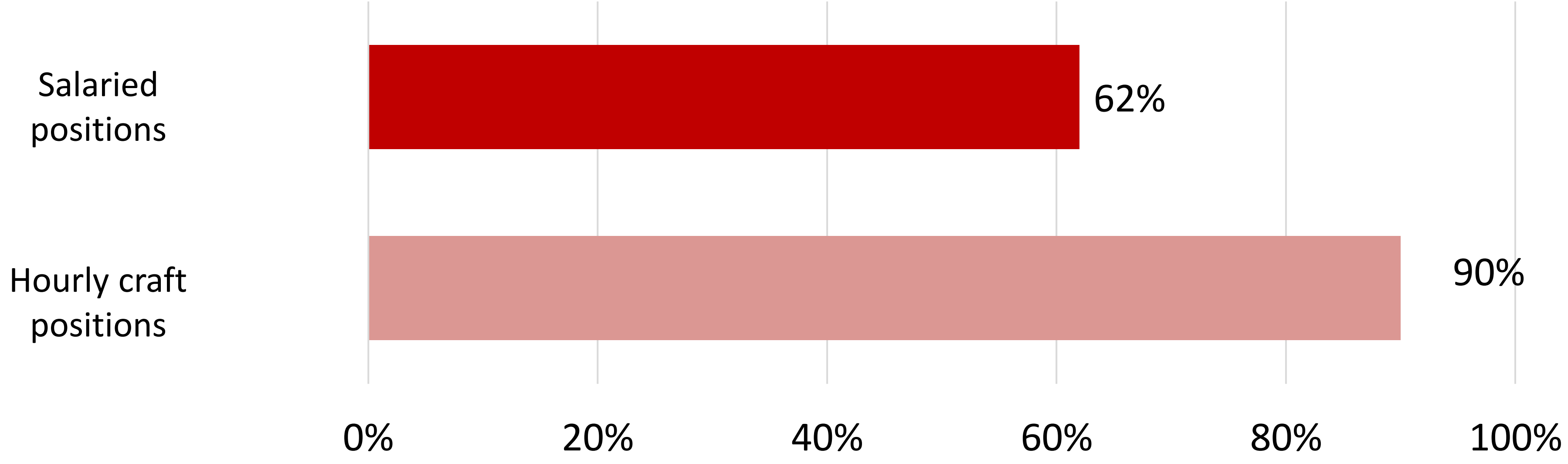
Source: BLS state and area employment, www.bls.gov/sae

2021 AGC Workforce Survey Results
(responses: 2,136)

Hiring expectation



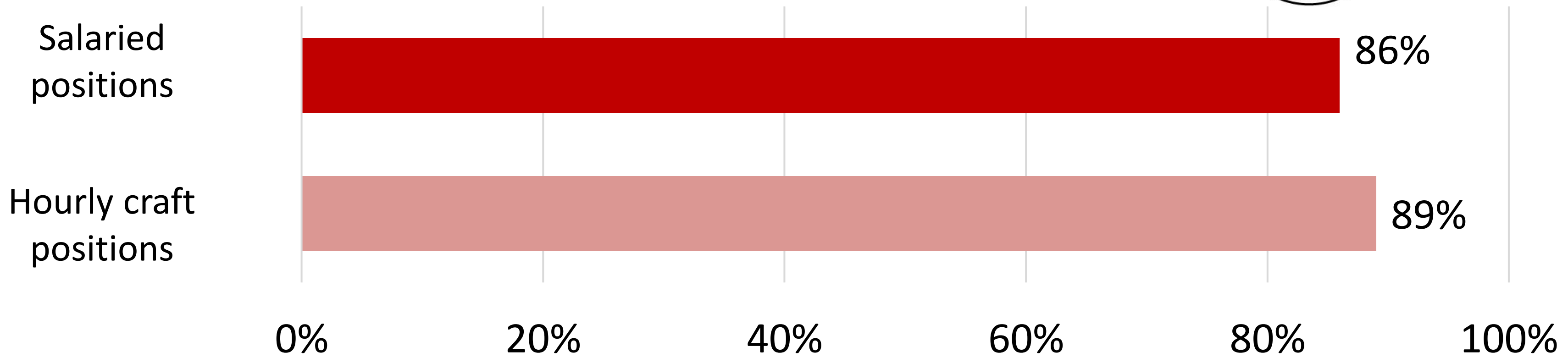
Need to fill open positions



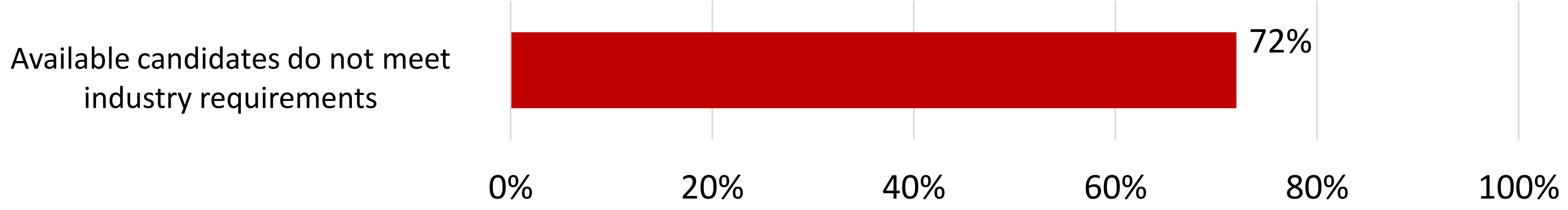
Source: 2021 AGC Workforce Development Survey

2021 AGC Workforce Survey Results

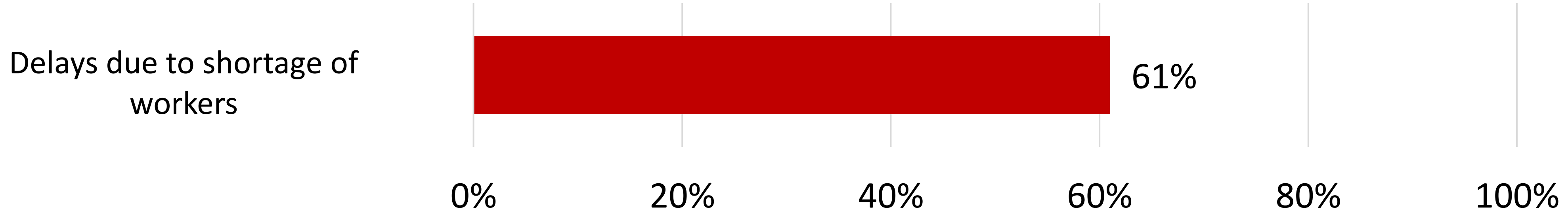
We are having a hard time filling some or all positions



Difficulty finding quality workers



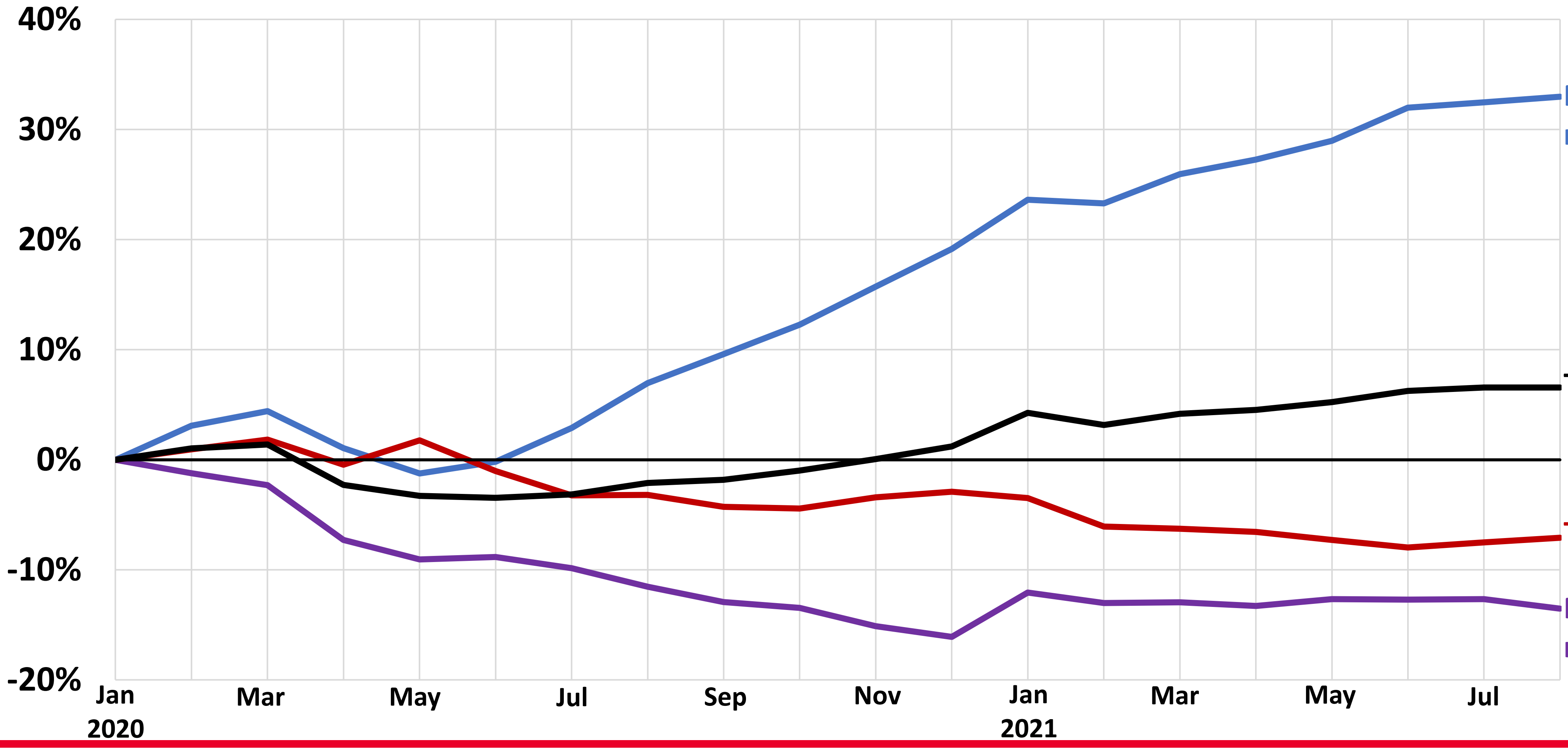
Construction delays



Source: 2021 AGC Workforce Development Survey

Construction Spending

Cumulative % change, January 2020 – August 2021, seasonally adjusted



	% change 8/20-8/21:	1/20-8/21:
Private residential	24.3%	33.0%
Total	8.9%	6.6%
Total public	-4.0%	-7.1%
Private nonresidential	-2.3%	-13.5%

Source: US Census Bureau, Construction Spending

Year-to-date construction spending: Jan-August 2021 vs. Jan-August 2020
(not seasonally adjusted)

- Total 7%; private residential 26% (single-family 38%; multi 18%); private nonres -7%; public -6%

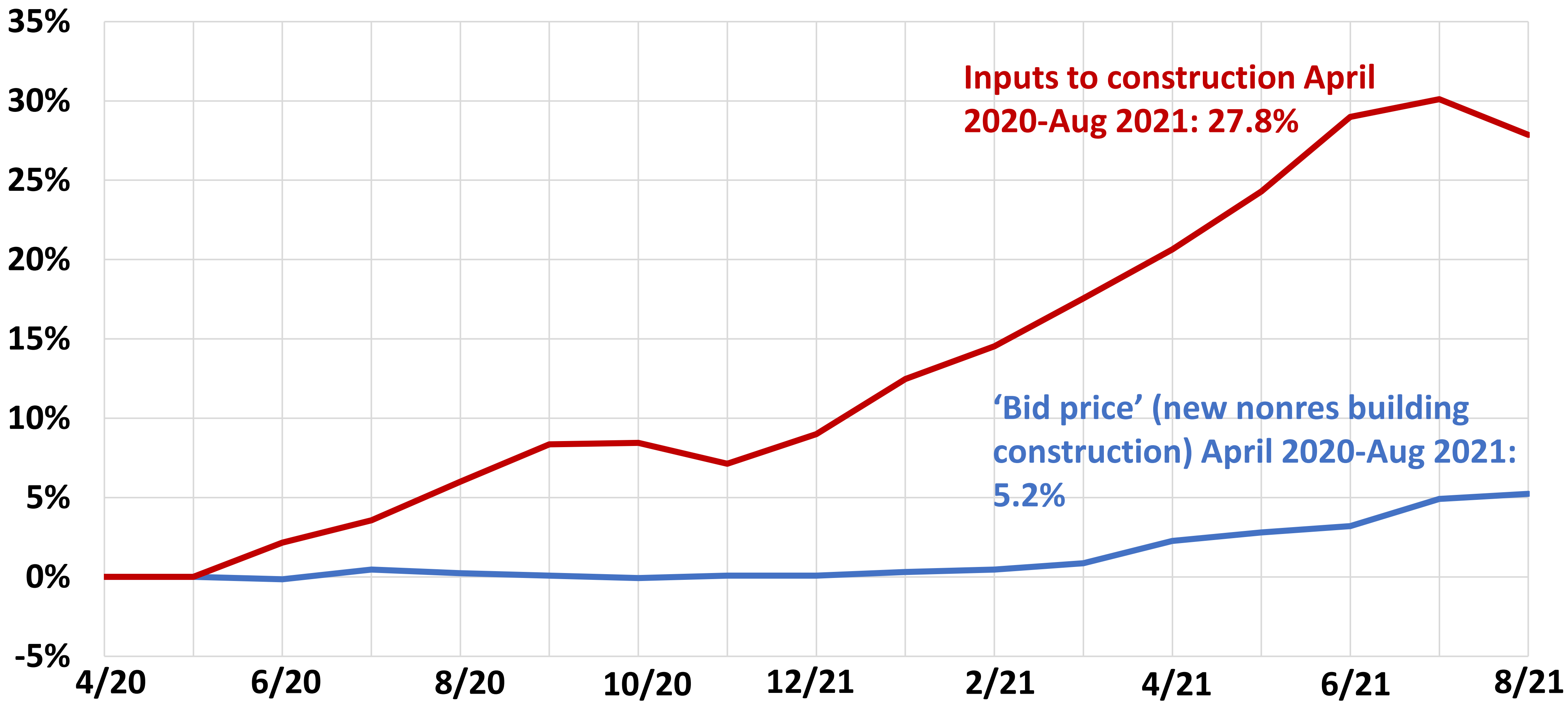
Largest segments (in descending order of 2021 year-to-date spending)

- Power -3% (electric -2%; oil/gas fields & pipelines -10%)
- Education -11% (primary/secondary -8%; higher ed -16%)
- Highway and street -3%
- Commercial -2% (warehouse 11%; retail -15%)
- Office -10%
- Mfg. -1% (chemical 7%; transp. equip. 4%; food/beverage/tobacco 15%; electronic/electric -17%)
- Transportation -6% (air -12%; freight rail/trucking -6%; mass transit 4%)
- Health care -2% (hospital 3%; medical building -6%; special care -3%)
- Lodging -31%

Source: Author

Construction input and 'bid price' producer price indexes (PPIs)

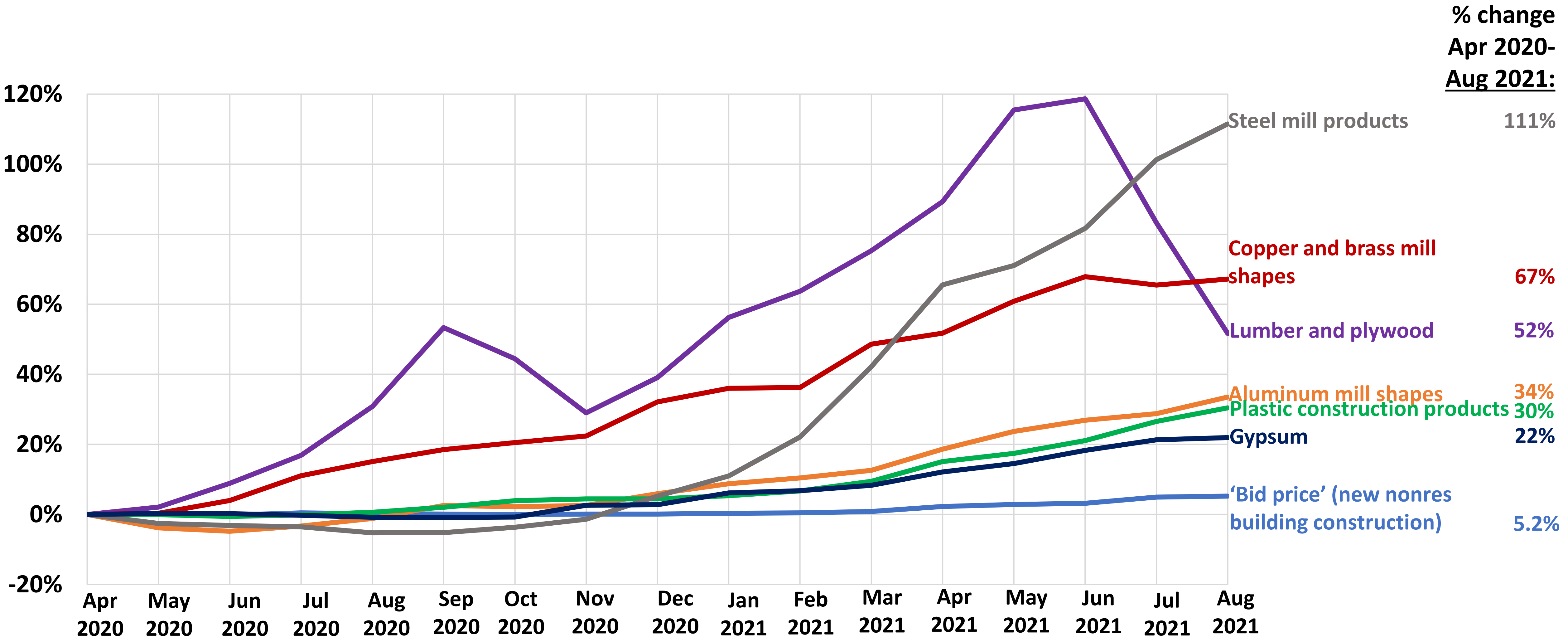
cumulative change in PPIs, April 2020–Aug 2021 (not seasonally adjusted)



 Source: Bureau of Labor Statistics, producer price indexes, www.bls.gov/ppi

Price changes for construction and selected materials

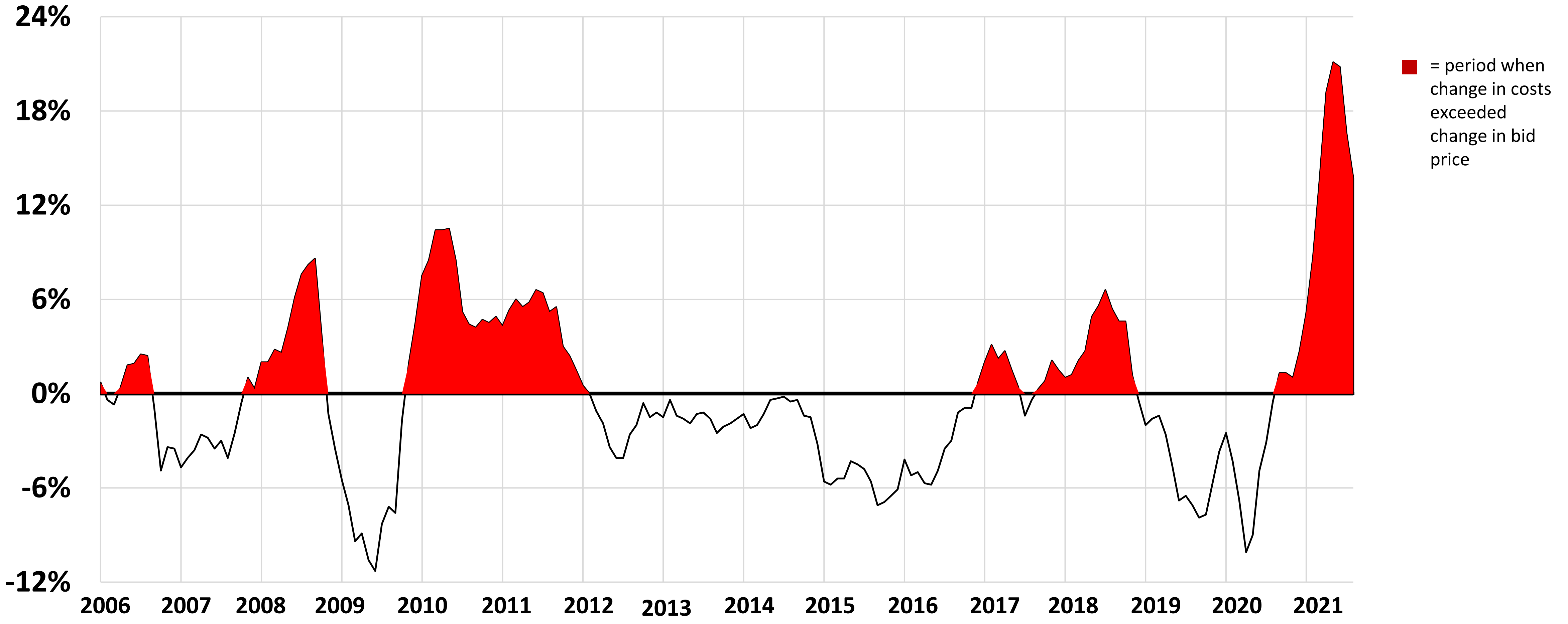
April 2020- August 2021



 Source: Bureau of Labor Statistics, producer price indexes (PPIs) for new nonresidential building construction (bid prices), gypsum products, wood, metal products, and plastic products, not seasonally adjusted

Cost squeeze on contractors can last two years or more

Difference between year-over-year change in materials costs vs. bid prices, Jan 2006-August 2021



Source: Bureau of Labor Statistics, www.bls.gov/ppi, producer price indexes for goods inputs to nonresidential construction (material costs) and new warehouse construction (bid prices)

AGC's responses to material cost and supply-chain issues

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- *Construction Inflation Alert*: https://www.agc.org/learn/construction-data/agc-construction-inflation-alert
- ConsensusDocs Price Escalation Resource Center: https://www.consensusdocs.org/price-escalation-clause/
- Recording of webinar on "Soaring Material and Supply-Chain Costs and Delays": https://store.agc.org/Store/CSI/Store/Product_List_WebEds.aspx
- Presentations to government contracting officials and owner groups
- Lobbying for tariff relief on lumber, steel, aluminum, and products
  - Presentation to National Economic Council, VP's chief economist, Commerce chief economist
  - Presentations in coalitions to counselor to Commerce secretary, Senate & House trade staff

 Source: Author

Forward-looking indicators

Indicator	Latest date	Current value	Year-ago value
Architecture Billings Index (ABI)	August	55.6	41.4
Dodge Momentum Index (DMI)	Sept.	165	127
Multifamily permits not yet started	August	101,000	70,000

Source: American Institute of Architects (ABI), Dodge Data & Analytics (DMI), Census Bureau (New Residential Construction)

Medium-term impacts as recovery begins

- Economic recovery looks more certain but virus risks remain, especially for construction: vaccination rate = 57% for construction workers, 81% for other occupations
- Slower rebound than for other sectors as owners, investors/lenders, institutions, and public agencies face uncertainty about future demand, project costs, and completion times
- Continuing cost and supply challenges may lead to more project deferrals
- Less demand than pre-crisis for retail, offices, higher ed, lodging & travel-related
- Unclear how states and localities will spend added tax revenue and federal dollars
- Senate infrastructure bill won't become law before October, if at all
- Best private prospects: remodeling, local distribution centers, data centers, restaurants

Source: Author

Long-run construction outlook (post-pandemic)

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- Slower population growth means slower demand growth for most construction
- Permanent shift from retail to e-commerce/distribution structures
- More specialized and online healthcare facilities; fewer hospitals, nursing homes
- More wind, solar, battery storage and charging facilities, and related manufacturing
- Less oil drilling and pipeline construction
- Continuing demand for K-12 but much less for higher ed construction
- Not clear if offices will decentralize or remain in less demand
- Not clear yet if urban/rural or state-to-state trends will change

Source: Author

Population change by state, July 2019–July 2020 **(U.S.: 0.35%)**

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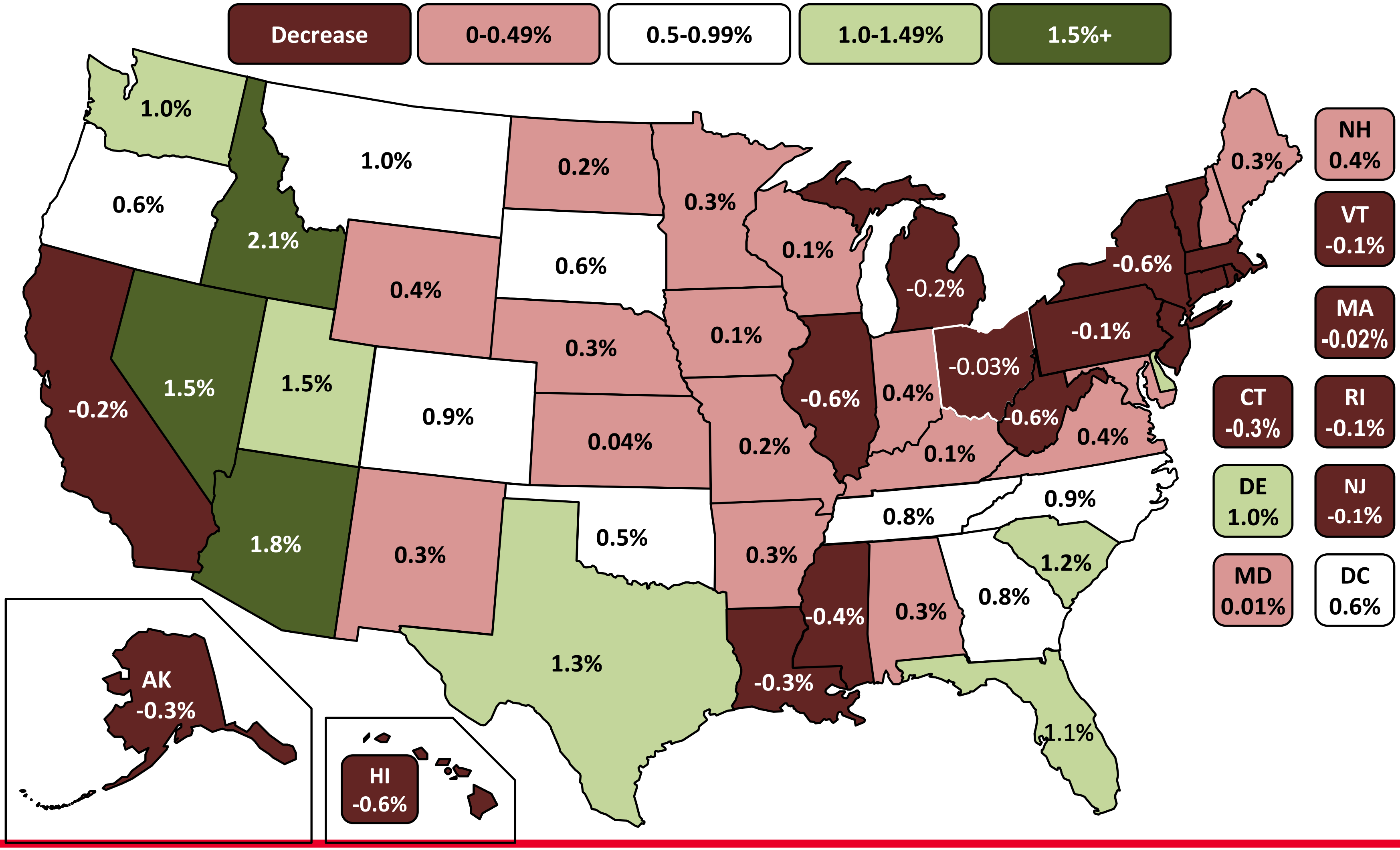
Top 5

ID	2.1%
AZ	1.8%
NV	1.5%
UT	1.5%
TX	1.3%

Bottom 5

NY	-0.6%
IL	-0.6%
HI	-0.6%
WV	-0.6%
MS	-0.4%



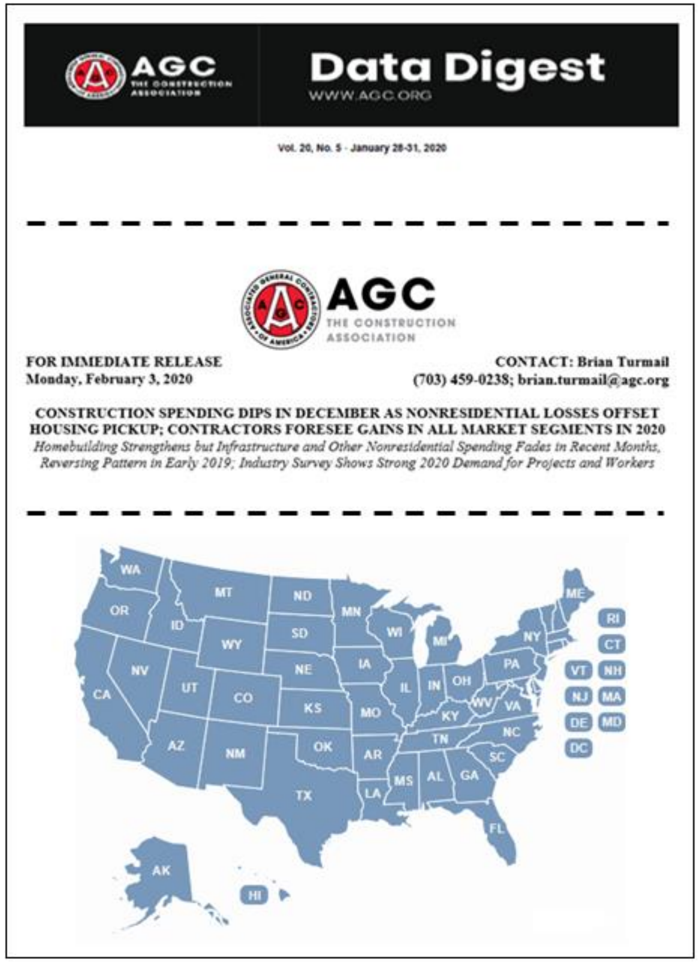
Source: U.S. Census Bureau, Dec. 2020 estimates, www.census.gov/popest

AGC economic resources
(email ken.simonson@agc.org)

- *The Data DIGest*: weekly 1-page email (subscribe at http://store.agc.org)
- *Construction Inflation Alert*:

https://www.agc.org/learn/construction-data/agc-construction-inflation-alert

- ConsensusDocs Price Escalation Resource Center: https://www.consensusdocs.org/price-escalation-clause/
- Surveys, state and metro data, fact sheets: www.agc.org/learn/construction-data
- Monthly press releases: construction spending; producer price indexes; national, state, metro employment with rankings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CONSTRUCTION SPENDING DIPS IN DECEMBER AS NONRESIDENTIAL LOSSES OFFSET HOUSING PICKUP; CONTRACTORS FORESEE GAINS IN ALL MARKET SEGMENTS IN 2020

Homebuilding Strengthens but Infrastructure and Other Nonresidential Spending Fades in Recent Months, Reversing Pattern in Early 2019; Industry Survey Shows Strong 2020 Demand for Projects and Workers

Source: Author